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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO 09/030,258 02/25/98 SCHULTZ 12217-100 **EXAMINER** LM01/0303 THOMAS F PRESSON LAO,S WIGGIN & DANA **ART UNIT** PAPER NUMBER INTELLECTUAL PROPERTY LAW SECTION ONE CENTURY TOWER 2755 NEW HAVEN CT 06508-1832 **DATE MAILED:**

03/03/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/030,258

S. Lao

Applicani(S)

Examiner

Group Art Unit 2755

Schultz, et al

X Responsive to communication(s) filed on
X This action is FINAL.
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle35 C.D. 11; 453 O.G. 213.
A shortened statutory period for response to this action is set to expire3month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).
Disposition of Claim
☐ Claim(s) 1-59 is/are pending in the applicat
Of the above, claim(s) is/are withdrawn from consideration
☐ Claim(s) is/are allowed.
Claim(s) 1-59 is/are rejected.
☐ Claim(s) is/are objected to.
☐ Claims are subject to restriction or election requirement
Application Papers
☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on is ☐ approved ☐disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.
Priority under 35 U.S.C. § 119
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
☐ All ☐Some* None of the CERTIFIED copies of the priority documents have been
received.
received in Application No. (Series Code/Serial Number)
received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received:
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
Attachment(s)
Notice of References Cited, PTO-892
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).
☐ Interview Summary, PTO-413
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152
SEE OFFICE ACTION ON THE FOLLOWING PAGES

DETAILED ACTION

- 1. Claims 1-59 are pending. This action is in response to the amendment filed 12/27/1999.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 1-4, 21-26, 47-53, 55-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnamurthy et al.

As to claim 59, Krishnamurthy teaches (Yeast system) process for generating executable operational commands (actions) for gathering data comprising the steps of: collecting inputs (server receives event announcement) from at least one source of information (client); processing the inputs (match the event component of specification) to generate at least one set of self-modifying (event announcement made by actions of Yeast specification) commands that can be executed (action component of specification); storing said at least one set of self-modifying commands in a computer-readable medium (store specification); and selectively executing one or more of said at least one set of self-modifying commands in response to an event data signal (execute the action component if the event component matches). See, page 138, section 2.3, 2nd para.)

As to claim 1, Krishnamurthy teaches data processing system (Yeast, event-based cooperative process management system), including

one or more event modules (client) including code that generates an event data signal representative of a particular event (client commands, announce events, page 134, section 2; page 137, section 2.2.2),

one or more scripts (action component of specification) each of said one or more scripts having one or more instructions (sequence of command, section 2, first para., section 3.2),

one or more processing modules (server, command interpreter) each including code that provides processed data (match the event component) to said one or more scripts (trigger action) (sections 2.2.2, 2.3); and

a task module (server), selectively communicating with each of said one or more event modules (client), including code for execution of a selected one of said one or more scripts that corresponds to said event data signal (command interpreter to execute the action component, page 134, section 2; section 2.3);

during said execution, said selected script interfaces with one or more processing modules (interact with user, page 137, section 2.2.2) and incorporates results of said interfacing into said selected script (event announcements made by user, or tools or actions of Yeast specification, page 141, section 2.2.2).

It is noted that Krishnamurthy incorporates results of interfacing into selected script because the execution of a Yeast action can trigger further event announcement and thus course of actions is modified by the actual events and actions during execution. It is further noted that the limitation of one or more is interpreted as one.

As to claim 47, it is basically a method claim of claim 1 and Krishnamurthy further teaches event-action based process management (process management, section 3) wherein the process steps are the action components of specification. As to the process steps being self-modifying, it is met by Krishnamurthy because the actual process steps / actions to be taken are determined by the way an event is announced (user/tools/actions) and action triggering further action is self-modifying.

As to claim 2, Krishnamurthy teaches implementing event-action based process management (fig. 1) in a high speed execution environment (Sun/Unix system, page 135), wherein the time difference between actions would have been very small, as such, the execution of scripts/actions would have been substantially simultaneous.

As to claim 3, Krishnamurthy teaches converter module to maps said event data signal to one or more scripts upon reception (command interpreter, match the event component, page 134, section 2.3).

As to claim 4, Krishnamurthy teaches one or more processing modules / task module as client / server.

As to claims 21-26, inherently, Krishnamurthy's system includes storage / computer-readable medium / persistent memory for storing code. Since the system of Krishnamurthy interacts with user (page 137, section 2.2.2), including a standard language interface or a graphical user interface would have been inherent. Script building module for creating one or more scripts is met by Krishnamurthy (generating specification, page 141, section 3.2, first para.).

As to claim 48, gathering response based upon results of execution is met by announcing events by execution of Yeast action, as discussed on claim 47.

As to claims 49-53, 55-56, Krishnamurthy teaches storage means (section 2.3, 2nd para.), means for transmitting response data (user/client notification), processing module (Yeast server), event module (client), means for controlling (Yeast server), means for determining operating status (failure notification, fig.1), programming means (client specification command, sections 2.2.1, 2.2.3).

As to claim 57, Krishnamurthy teaches executing means will not interface with an unavailable processing means (Yeast not operational, section 2.3, first para.).

As to claim 58, note discussion of claim 2.

4. Claims 5-19, 28-33, 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnamurthy et al as applied to claim 1 in view of Waclawsky et al.

As to claims 5-6, 8-9, Waclawsky teaches event-based network management (event driven interface, abstract), including providing information relating to operating conditions (performance measure, step 408) and load balancing (load balancing, modify network operation) (abstract, step 412). Direct communication is taught by the network configuration. Since Krishnamurthy and Waclawsky address event management, it would have been obvious to combine the teachings.

As to claim 7, storing script/specification would have been inherent to Krishnamurthy.

As to claims 10-12, Krishnamurthy as modified teaches (Waclawsky) bidirectionally and substantially simultaneously transmitting data between (network), dynamically assigning processing functions (compare performance and modify network operation, steps 408, 410, 412).

As to claims 13-19, Krishnamurthy as modified teaches (Waclawsky) communication interfaces (event driven interface) and protocols (method/system of Waclawsky) between various modules of the network.

As to claims 28-32, Krishnamurthy as modified teaches (Waclawsky) protocols and communication interfaces (note discussion of claims 13-19 above), means for transmitting and receiving response data (client/server), and peripherals (printer 26).

As to claim 33, note discussion of claim 1 and Krishnamurthy as modified teaches (Waclawsky) resource management module that dynamically assigns processing functions to (media manager 102); and administrative module that receives and presents data relating to (network monitor 22). Fig.s 1, 6, 10.

As to claim 54, note discussion of claim 8 (load balancing).

5. Claims 20, 27, 34-35, 41-44, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnamurthy et al as applied to claim 1 in view of Bloem et al.

As to claims 20, 27, Krishnamurthy teaches (page 137, section 2.2.2, page 133, second para.) actions are inter-related by events, and events trigger actions which in tern trigger further event announcement. As such, scripts/actions are modified dynamically / at run time. Further, Bloem explicitly teaches one or more scripts is preprogrammed to iteratively/dynamically update/modify its contents (type 2 trigger dynamically generates and executes a list of type 1 triggers) (col. 2, lines 43-56; col. 8, line 40 - col. 9, line 17). Since Krishnamurthy and Bloem address event based system management, it would have been obvious to combine the teachings.

As to claim 34, it is basically a method claim of claim 1. Further, note discussion of claim 20 for dynamically incorporating results of execution into a script / dynamically updates and modifies.

As to claim 35, note discussion of claims 13-19 and 32 for communication interface and peripherals.

As to claims 41-44, note discussion of claims 13-19 for protocols and interfaces, claim 2 for substantially simultaneously. Accessing only the peripheral modules that capable of performing processing operations is inherent to load balancing of Waclawsky.

As to claim 46, providing results of execution is taught by Waclawsky (monitor performance).

6. Claims 36-40, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnamurthy et al in view of Bloem et al as applied to claim 34 and further in view of Waclawsky et al.

As to claim 36, note discussion of claim 11.

As to claims 37-40, Waclawsky teaches producing response data signals as a result of execution (monitor performance); transmitting response data signals from a task module to selected said one or more peripheral modules (output control signal, step 412), storage (memory 100). As to the step of translating, data formatting/translating is common practice in the art when a sender and a receive have different formats/conventions.

As to claim 45, note discussion of claims 20 and 27.

7. Applicant's arguments filed 12/27/1999 have been fully considered but they are not persuasive.

Applicant argued in substance (1) Krishnamurthy does not teach one or more scripts because the commands are static and predefined and provides no predetermined logical connection between the sequence in which the commands are invoked (page 2, second para.), (2) Krishnamurthy does not teach dynamically modifying the sequence and substance of subsequent steps (page 3, first para.), (3) Krishnamurthy does not teach self-modifying script but rather the registration of specification (page 5, first para.).

As to (1), whether the commands are static and predefined is not specified by the claims. A predetermined logical connection between the sequence is not claimed. The

logical connection between the sequence in Krishnamurthy is determined by the event component of the specification which is registered before execution.

As to (2), Krishnamurthy is not relied on to teach dynamically modifying which is met by Bloem, as shown in discussion of claim 20.

As to (3), in Yeast, specification registration is performed through client specification commands such as addspec(), lsspec(), etc, as shown in page 136-138, sections 2.2.1, 2.2.3. The announce() command is the means to generate event signal, not specification management. Yeast events are announced with event attributes. See page 137, section 2.2.2. The event announcement can be made interactively by users, or automatically by tools, or by the actions of Yeast specifications. It is the latter means of event announcement that produces nested event-action sequence during execution, as such the action is self-modifying or incorporating previously results.

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (703) 305-9657. A

voice mail service is also available at this number. The fax number for this Group is (703) 305-9731.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Sue Lao

February 25, 2000

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